


Not the same cold medicine on the shelf

 You may have noticed that some familiar cold medicines that contain **pseudoephedrine** are now kept behind the pharmacy counter. **Pseudoephedrine** (“soo-doe-eh-fed-reen”) is a common ingredient in cold medicines such as **Sudafed**, **Wal-Phed**, **CVS Nasal Decongestant**, and others. This medicine is a decongestant. It shrinks the blood vessels in your nose which makes it easier to breathe.

Pseudoephedrine is also a major ingredient used to illegally make methamphetamine (“meth-am-fet-ah-meen”).¹ Methamphetamine is a highly addictive stimulant drug. Some people call it “speed.” It makes the heart beat faster and blood pressure go up. It can lead to permanent damage to blood vessels in the brain, causing a stroke.² Using **pseudoephedrine** from cold medicine, people have found a way to make methamphetamine illegally.

As a result, drug companies have replaced the **pseudoephedrine** with a different decongestant called **phenylephrine** (“fen-el-ef-rin”). Some drug makers have added “PE” to the end of the cold medicine’s name to show that it is different (**Sudafed PE**, **Wal-Phed PE**, **CVS Nasal Decongestant PE**, others). People generally take LESS of the medicine with **phenylephrine** per dose than the medicine with **pseudoephedrine**. For example, if you used to take 2 **Sudafed** tablets per dose, you should take only 1 **Sudafed PE** tablet.

While the ingredients are different, the packages of the medicines are very similar to one another. **Sudafed** and **Sudafed PE** (as well as other brands) both come in red and white boxes. Inside, the foil blister packs for both medicines contain small, red tablets. The similarities are so strong, they can easily be confused.



Top: **Sudafed PE** with **phenylephrine**;
Bottom: **Sudafed** with **pseudoephedrine**.

As a result, ISMP has recently received several reports of accidental overdoses of cold medicines that contain **phenylephrine**.

In one case, a nurse, her husband, and her children each took twice as much **Sudafed PE** as they should have for 3 to 4 days. All of them experienced headaches and nausea. Her husband missed a day of work because he developed irregular heartbeats and dizziness. The nurse thought her family members were taking **Sudafed** as they always had. After all, it looked like the same small

red tablet they were used to taking. Instead, they were taking **Sudafed PE** which contains **phenylephrine** instead of **pseudoephedrine**.

Another man told us a pharmacy clerk (not the pharmacist) had given him the cold medicine off the shelf with **phenylephrine**. The clerk told the man it was “generic” for **Sudafed** (**pseudoephedrine**). The man took 2 tablets for each of 3 doses before he read the package and discovered that he was taking too much medicine.

Both **pseudoephedrine** and **phenylephrine** are safe when used as instructed. Nevertheless, if what you are taking is not what you think it is, dangerous mistakes are possible. Always read packages carefully to learn the exact main ingredients and how much to take for each dose. This is important even if the medicine is familiar to you. If you have questions, ask a pharmacist for help.

References: 1. Kyle AD, Hansell B. *The Meth Epidemic in America: Two Surveys of US Counties*. Washington, DC: National Association of Counties; July 5, 2005.
2. National Institute on Drug Abuse. *NIDA InfoFacts: Methamphetamine*. Bethesda, MD: NIDA; May 2005. Available at: www.nida.nih.gov/Infofacts/methamphetamine.html.

Medi quotes

Only the right dose differentiates a poison and a remedy.

— Paracelsus, a 16th century Swiss doctor and alchemist

Alert! Glucose meter readings may give wrong results



Several blood glucose meters (used by diabetics to test blood sugar levels) may display blood sugar values in a way that could lead to mistakes. In the United States (US), blood sugar is measured in milligrams per deciliter (mg/dL). A blood sugar of 70-120 mg/dL is generally within the normal range. In other countries, blood sugar is measured in millimoles per liter (mmol/L). In that case, a blood sugar of 4-7 mmol/L is considered normal. For some unknown reason, certain glucose meters began displaying blood sugar results the way it usually appears in other countries (mmol/L). Most often, the change occurred after the glucose meter was dropped by mistake, or after the time and date were changed, or the battery was replaced.

These meters are all made by Abbott, and are called:

- FreeStyle
- FreeStyle Flash
- FreeStyle Tracker
- Precision Xtra
- Precision Sof-Tact
- MediSense Optium
- Glucose meters sold under labels for ReliOn Ultima, Rite Aid, and Kroger.

With these affected glucose meters, the displayed glucose values (in mmol/L) can lead diabetic patients to give themselves the wrong dose of insulin. **All meters used in the US should show "mg/dL" on the screen**, usually in the top or bottom corner. If yours does not show "mg/dL" be sure to contact your doctor so you can get a correct blood sugar measurement for your insulin dose.

Instructions on how to correctly set the glucose meter can be found on this webpage: http://abbottdiabetescare.com/news/20051014_urgent_devicecorrection.aspx. If you have questions or need help, call Abbott Diabetes Care customer care at 800-553-4105. Glucose meters should not be returned to where they were purchased. If you registered your meter with the company, you should also receive a letter in the mail about this problem.

60-second safety tip

■ **Don't take medicine in the dark!** A man was awakened by a toothache in the middle of the night. Without turning on the lights, he pulled out and applied what he thought was a spray of pain reliever for his toothache. Afterwards, he did not rinse his mouth. In the daylight of the morning, he realized he had actually used **Lamisil AT Pump Spray** in his mouth. **Lamisil AT (terbinafine hydrochloride 1%)** is used for fungal infections on the skin such as athlete's foot and ringworm. It should never be placed in the mouth or swallowed. The medicine can be absorbed by the body through the gums. It also has a high alcohol content (28.7%). The man called Poison Control (800-222-1222), which advised him to see his doctor immediately. He did, and he was not harmed. However, this story should serve as a reminder to avoid taking medicine in the dark!

Contact Information



Safe Medicine (ISSN 1550-6282) ©2006 Institute for Safe Medication Practices (ISMP). Reproduction is prohibited without written permission from ISMP. Editors: J. Smetzer, RN, BSN; N. Tuohy, RN, MSN; M. R. Cohen, RPh, MS, ScD, R. Jenkins, MD. ISMP, 1800 Byberry Road, Suite 810, Huntingdon Valley, PA 19006. Email: consumer@ismp.org. To subscribe, visit: www.ismp.org/Newsletters/consumer/default.asp.



Poison Prevention Week: March 19-25

In support of Poison Prevention Week, read below for a few startling facts about poisonings in the US during 2004.¹ (No information is yet available for 2005.)

- ✓ Poison control centers received one telephone call every 13 seconds for advice about poisonings.
- ✓ More than a quarter million of poisonings were from medicines.
- ✓ Some people died because they wanted to hurt themselves, but 58 people died from accidental poisonings from medicines.
- ✓ Medicines for pain and depression were most often involved in poisoning deaths.
- ✓ Most of the deaths from pain relievers involved a common over-the-counter medicine (no prescription needed), **acetaminophen (Tylenol)**.
- ✓ Most of the deaths from depression medicines involved a prescription medicine, **amitriptyline (Elavil)**.
- ✓ Nineteen (19) children under the age of 6 died. Five (5) of them had accidentally taken over-the-counter medicines, and 14 had accidentally taken prescription medications.

To help avoid accidental poisonings, always take medicines according to the instructions from your doctor. If you have questions or miss a dose, call your pharmacist. Store medicines safely and locked away from children. Keep in mind, *child-resistant* does not mean *child-proof*. Call poison control in any emergency or even if you just have a question. The national toll-free number is **800-222-1222**. Post this number on or near your telephones.

Reference: 1. Watson, WA, et al. 2004 Annual Report of the American Association of Poison Control Centers Toxic Exposure Surveillance System. *Am J Emerg Med*. 2005;23(5):589-666. Available: www.poison.org/prevent/documents/TESS%20Annual%20Report%202004.pdf.

► Brand name medicines appear in **green**; generic medicines appear in **red**.